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Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of

Revision of the Commission's Rules to
To Ensure Compatibility With Enhanced 911
Emergency Calling Systems

CC Docket No. 94-102

REPLY COMMENTS OF NET2PHONE, INC.

Net2Phone, Inc., ("Net2Phone"), submits these Comments in reply to the initial comments filed in the above-captioned docket pursuant to the Federal Communications Commission's ("Commission") December 20, 2002 Further Notice of Proposed Rulemaking ("FNPRM").¹ Net2Phone's Reply Comments are limited to the issues related to the extension of 911 and E911 requirements on emerging voice over Internet Protocol ("VOIP" or "IP telephony") technologies. Net2Phone agrees with those commenters urging the Commission to refrain from applying 911 requirements to nascent VOIP technologies.²

¹ See *Revision of the Commission's Rules to ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, *Further Notice of Proposed Rulemaking* (rel. December 20, 2002) ("FNPRM"); Public Notice, DA 03-209 (rel. January 27, 2003) (extending the comment date).

² See *generally* Comments of the Cellular Telecommunications & Internet Association ("CTIA"), the Intelligent Transportation Society of America ("ITSA"), and WorldCom.

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In its FNPRM, the Commission noted that in “initiating this *Further Notice*, [it was] mindful of the need to balance the expectations of consumers to have access to 911 service with the need to continue to foster growth and competition in the telecommunications marketplace.”³ Net2Phone believes that the Commission’s dual goals of fostering competition and protecting consumers would be best served by excluding VOIP services from 911 requirements at the present time.

I. VOIP SERVICES DO NOT FALL WITHIN ANY OF THE COMMISSION’S EXISTING 911 CRITERIA.

The **FNPRM** seeks comment on whether 911 and E911 rules should apply to emerging technologies such as IP telephony.⁴ In its *E911 First Report and Order*, the Commission specified four criteria for determining which wireless providers should be subject to its E911 requirements.⁵ The Commission required E911 compliance for those licensees “(1) that offered real-time, two-way switched voice service, interconnected with the public switched network, either on a stand-alone basis or packaged with other telecommunications services; (2) whose customers clearly expected access to 911 and E911; (3) that competed with analog and broadband PCS providers, and (4) where it is technically and operationally feasible to provide enhanced 911 service.”⁶ Applying the Commission’s existing rules in determining whether 911 obligations should extend to VOIP, it is readily apparent that IP based services in all their forms do not meet any - let alone all - of the requirements necessary to offer 911 access.

³ FNPRM at 2

⁴ FNPRM at 39.

⁵ Revision of the Commission’s Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 18676, 18716-18 at paras. 80-84 (1996) (“*E911 First Report and Order*”)

⁶ Id.

A. VOIP services do not interconnect with the PSTN.

IP communications are not classified as switched voice services offered over the PSTN. As CTIA points out, certain IP devices “provide voice and data IP-based services over the Internet (and other data networks) rather than the Public Switched Telephone Network.”⁷ The Commission has declined to extend 911 obligations onto CMRS services that did not connect to the PSTN and those that provided data services.⁸ For this reason alone, all VOIP services should not be subject to blanket 911 requirements.

B. Customers do not have a clear expectation to access 911 through VOIP services.

Net2Phone and many other VOIP providers inform potential customers that 911 capabilities cannot be provided with VOIP service. Customers therefore have no expectation that they could access 911 through their VOIP services. This is especially true for those services that require the use of an access code and PIN. *It would be counter intuitive for consumers to dial an access code, wait for a prompt, dial a pin, and then dial 911 in an emergency situation.*⁹ The purpose of maintaining a universal three-digit national emergency system is to permit customers to receive aid as quickly as possible. In emergency situations, customers will use their traditional local service to access 911. Additionally, Net2Phone does not advertise its VOIP services as replacements for traditional local service. As WorldCom correctly points out, for those IP-based service providers seeking to “offer services that compete directly with

⁷ CTIA comments at 6.

⁸ *E911 First Report and Order* at para 81. The Commission declined to extend 911 requirements to CMRS carriers that offered data only services and those that did not interconnect with the **PSTN**.

⁹ See Comments of the Association for Communications Technology Professionals in Higher Education, (“ACUTA”); Association of Public-Safety Communications Officials- International, Inc. (“APCO”); Boulder Regional Emergency Telephone Service Authority (“**BRETSA**”); National Emergency Number Association (“NENA”) and the National Association of State Nine One One Administrators (“NASNA”); and Washington State Enhanced 911 Program, Camp Murray (“~~Washington State~~”).

traditional, wireline local exchange service, they have every incentive to offer the most robust E911 capabilities that the existing infrastructure allows.”¹⁰ Those VOIP providers that do not offer E911 capabilities cannot hold themselves out as competing with traditional wireline local exchange services. Thus, customers that use VOIP services that complement rather than replace traditional wireline services do not have a reasonable let alone a “clear” expectation of accessing 911 over those services.

Net2Phone also recognizes that as technologies continue to develop, customer expectations will change accordingly. Regulating to meet potential customer expectation is unnecessary given the low level of VOIP penetration. Indeed, the Commission’s stated policy is to refrain from imposing 911 obligations onto emerging technologies that are not yet widely deployed.” The Hatfield Report recommends that a possible solution to any potential customer confusion would be in “consumer education” rather than the premature imposition of 911 requirements on emerging **technologies**.¹² Since VOIP providers such as Net2Phone educate potential customers on both the benefits and limitations of using an IP based service, imposition of 911 requirements based on future customer expectations are unnecessary at this time.

C. VOIP services do not compete with traditional analog services.

As stated above, IP telephony is generally offered as a service that complements rather than replaces customers’ existing local service. The Commission has recognized that emerging “services such as IP Telephony are not widely **deployed**.”¹³ IP services are only now beginning to show their future competitive promise and innovative

¹⁰ WorldCom comments at 2.

¹¹ See *E911 First Report and Order*, 11 FCC Rcd at 18718 (para. 83)

¹² Hatfield at 43.

¹³ **FNPRM** at para 113.

technical applications and can continue to do so as long as they are left unfettered by costly and burdensome regulations. Even those commenters seeking to impose 911 regulations on IP telephony do not contend that VOIP is a replacement to traditional local service. For instance, while one commenter recommends that the Commission encourage VOIP systems to develop E911 solutions,¹⁴ it states that according to its survey of colleges and universities using VOIP, the inability to access 911 “does not currently pose a major threat to health and safety, because at the present time, VOIP systems are generally in trials or very small system installations...” and there are traditional local services available for 911 access.”

Certain commenters also incorrectly urge the Commission to impose 911 obligations on emerging IP services based on the mere possibility that they may become a replacement to traditional local services in the future. The Commission has rejected similar arguments in its *E911 First Report and Order* by refraining from imposing 911 obligations on services that are still in their infancy because it would hinder the rapid introduction of new and enhanced services.¹⁶ Thus, the Commission understood that the public interest is best served by taking a refrained regulatory approach to foster the development of emerging services.

D. It is not technically and operationally feasible to provide 911 or E911 service in the existing VOIP environment.

Perhaps the most compelling public safety reasons to refrain from imposing 911 obligations on VOIP providers are the technical and operational limitations of doing so. As the Commission noted in its FNPRM, the Hatfield Report, “identifies potential

¹⁴ ACUTA comments at 2.

¹⁵ *Id.* at 3.

¹⁶ *E911 First Report and Order*, at para. 83

technical issues that may arise with voice delivered using the Internet Protocol (VOIP) communicating the necessary call-back and location information to PSAPs.”¹⁷ There is no evidence that PSAPs, LECs or other necessary third parties have the ability to transmit, receive and use E-911 information on pure data networks. Even those commenters that contend that 911 requirements should apply to VOIP technologies concede that absent further technological development, provision of 911 through VOIP may create inaccuracies and disconnects in emergency situations.” These same commenters, conclude that when “routing of the call is delayed or inaccurate, or the caller’s location cannot be determined, emergency response is delayed and limited public safety resources may be inefficiently used attempting to locate and respond to the caller.”¹⁹

Dr. Hatfield also correctly recognized that the existing 911 system “is seriously antiquated” and should be modernized in order to incorporate new technologies.²⁰ For instance, Dr. Hatfield asserts that “the Selective Routers that handle E911 calls may not even be able to handle modem common channel signaling protocols like SS7, let alone a protocol like the Session Initiation Protocol (“SIP”) widely used in VOIP...” and that this “means that an additional network element may be needed to accomplish the necessary protocol conversion with attendant cost and performance penalties and loss of advanced capabilities.”²¹ Thus, requiring nascent VOIP technologies to conform to an outdated

¹⁷ FNPRM at para. 113; citing Dale N. Hatfield, *A report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced E911 Services*, Public Notice, DA 02-2666 (“Hatfield Report”) at 6.

¹⁸ BRETSA comments at 2.

¹⁹ Id.

²⁰ CTIA comments at 2; WorldCom comments at 2.

²¹ Hatfield Report at 41.

911 system would not only impose prohibitive costs on **VOIP** providers, but could negate the very advances promised by these new technologies.

With regard to the user mobility and independence afforded by certain **VOIP** services, Dr. Hatfield found that these services pose significant problems for location identification and user safety in implementing 911. One industry magazine reported that “there is a down side to disconnecting the user’s presence from a pre-set physical location-- emergency services like 911 become more problematic, because the phone and user are not tied to a particular street address or desk location.”²² Since existing **VOIP** technologies may be incapable of reliably transmitting accurate 911 information, the Commission should take a cautious approach to premature imposition of 911 requirements on **VOIP** providers.

II. PREMATURE IMPOSITION OF 911 REQUIREMENTS ON VOIP COULD UNREASONABLY RAISE CONSUMER EXPECTATION EVEN WHERE EMERGENCY SERVICES ARE NOT ACCESSIBLE DUE TO TECHNICAL LIMITATIONS.

Certain commenters that seek to extend 911 mandates to **VOIP** technologies fail to discern the potential harm that this may bring to the public. As stated above, **VOIP** technologies are not ready to implement dependable 911 on a widespread basis. Were the Commission to impose 911 requirements on **VOIP**, it would necessarily raise consumer expectation that these technologies will not only be available with their **VOIP** service, but that they will reliably transfer emergency information to the requisite authorities. Presently, **VOIP** providers such as Net2Phone ensure that their customers do not have unreasonable expectations that 911 would be accessible through their service.

²² **Business Communications Review**, *Are IP phones for you?*; by Steven Taylor and Larry Hettick, (February 1, 2002).

This information enables consumers to make the appropriate arrangements in order to access emergency services. Where 911 requirements would extend to VOIP, providers would be forced to offer the service even where the service may be unreliable. This is a potentially dangerous situation that can be avoided by the Commission's refrain from premature imposition of legacy 911 requirements on emerging Internet-based voice services.

III. IMPOSITION OF 911 REQUIREMENTS ON VOIP TECHNOLOGIES WOULD CREATE HARMFUL DISINCENTIVES.

Contrary to the Commission's stated goal to promote technological development, the potential liabilities and costs associated with imposition of 911 on nascent VOP technologies could serve as disincentives to competition. VOP providers would be required to redirect resources from the development of these emerging technologies to insurance coverage and related liability costs. Consumers would also suffer from reduced application of advanced services since, as Dr. Hatfield indicates, providers may be forced to reduce the advanced applications of their networks to function with the antiquated 911 system.²³ Moreover, as one commenter correctly asserted, if the 911 mandates must be met before all VOP capable devices can provide the required location capabilities, many valuable and innovative devices might be abandoned as too expensive to develop.²⁴ Some commenters go so far as to suggest that the Commission prohibit the rollout of VOIP services that cannot conform to existing rigid 911 regulations or that providers who cannot offer 911 reduce the quality of their services.²⁵ This assertion is not only contrary to the Commission's stated policies but also to Congress' intent in

²³ Hatfield Report at 41.

²⁴ CTIA comments at 7.

²⁵ BRETSA comments at 2

establishing a “pro-competitive, deregulatory national policy framework’ in order to promote technological development for the benefit of consumers.”²⁶

IV. IMPOSITION OF 911 REQUIREMENTS ON VOIP COULD EXACERBATE PSAP FATIGUE.

Among the issues that the Hatfield Report cites that favor a refrained regulatory approach, are PSAP fatigue and PSAP readiness.” PSAP fatigue occurs when a PSAP is overburdened and under-funded. PSAPs are encountering significant difficulties in obtaining sufficient funding and manpower due to additional costs associated with Phase II E911 deployment and the recent redirection of funds by state legislatures for other programs.²⁸ Mr. Hatfield concludes that PSAP readiness and lack of technical capability poses a threat to the rapid and efficient rollout of wireless services.²⁹ PSAPs would be faced with additional difficulties in attempting to implement Internet-based 911 using an antiquated 911 system that could likewise threaten the rollout of VOIP services. Additionally, the imposition of E911 fees on VOIP providers would not solve PSAP fatigue as one commenter suggests.³⁰ To the contrary, this would further deter market entry and technological development. Accordingly, at present, the best course of action is to maintain the regulatory *status quo* as applied to VOIP.

V. THE COMMISSION SHOULD NOT SUBJECT VOIP PROVIDERS TO THE 911 REQUIREMENTS IMPOSED ON TELECOMMUNICATIONS SERVICES.

²⁶ 47 U.S.C. §§151 *et. seq.*

²⁷ Hatfield Report at 40.

²⁸ CTIA comments at 3.

²⁹ Hatfield Report at 31; CTIA comments at 3.

³⁰ APCO comments at 11.

Net2Phone disagrees with commenters seeking to impose the Commission's 911 regulations applicable to telecommunications carriers on VOIP providers.³¹ 47 CFR § 64.3001 requires all "telecommunications carriers" to transmit all 911 calls to a PSAP, to a designated statewide default answering point, or to ~~an~~ appropriate local emergency authority." Providers of VOIP services are not considered telecommunications carriers under the Commission's existing regulations and policies.³² Presently, all VOIP services are treated as information rather than telecommunications services and are therefore not subject to telecommunications regulation. Likewise, the imposition of similar telecommunications requirements on VOIP providers would impermissibly blur the express regulatory distinction between telecommunications and information services. Finally, this is not the proper proceeding to revisit the Commission's policies on the status of VOIP as an information service. The Commission should therefore reject any implication that the 911 requirements applicable to traditional telecommunications services apply to VOIP providers.

³¹ APCO comments at 11. Although APCO cites to the Commission's **rule 47 CFR 64.2502**, Net2Phone believes that this cite **may** have been in error. The **Correct** cite corresponding to the language referenced by APCO is **47 CFR 64.3000-3001**. .

³² *See generally, In the matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, 13 FCC Rcd 11501, Release Number 98-67, (released April 10, 1998), (Universal **Service** Order).

CONCLUSION

For the reasons stated herein, the Commission should not extend 911 and E911 obligations to emerging IP services and devices in order to ensure public safety and to promote the development of these nascent technologies.

Respectfully submitted,

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Certificate of Service

I hereby certify that on this 11th day of March, 2003, I caused true and correct copies of the foregoing Reply Comments to be deposited in the US. Mail, first-class, postage prepaid (unless otherwise noted) to the addresses listed on the attached Service List.

Dated: March 11, 2003
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